

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A resin coated metal sheet in which a solid, electrically conductive, magnetic coating film containing 20 to 60 mass% of a magnetic powder is coated to a thickness from 3 to 50 μm at least on one surface of a metal sheet, wherein

the magnetic powder is ~~selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder.~~

Claims 2-3 (Canceled)

Claim 4 (Original): The resin coated metal sheet according to claim 1, wherein a resin constituting the magnetic coating film is a polyester resin.

Claim 5 (Currently Amended): ~~The A~~ resin coated metal sheet according to claim 1 in which a solid, electrically conductive, magnetic coating film containing 20 to 60 mass% of a magnetic powder is coated to a thickness from 3 to 15 μm at least on one surface of a metal sheet, wherein

the magnetic powder is soft magnetic ferrite powder, and

the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive ~~and the thickness of the magnetic coating film is from 3 to 15 μm .~~

Claim 6 (Previously Presented): The resin coated metal sheet according to claim 5, wherein a total content of the electrically conductive additive and the magnetic powder in the magnetic coating film is from 30 to 60 mass%.

Claim 7 (Currently Amended): A resin coated metal sheet in which [[a]] an electrically conductive magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 50 μm at least on one surface of a metal sheet, wherein

the magnetic powder is ~~selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder~~; and

the resin coated metal sheet satisfies the following (1) or (2) and satisfies the following (3), where

(1) the magnetic coating film described above which is a heat releasing magnetic coating film having a heat releasing property is coated on one surface of the metal sheet and a heat releasing coating film of a thickness of 1 μm or more is coated on another surface of the metal sheet, at least one of the heat releasing magnetic coating film and the heat releasing coating film contains 1 mass% or more of carbon black, and the coating film not containing carbon black contains 10 mass% or more of heat releasing additives other than carbon black;

(2) the magnetic coating film which is a heat releasing magnetic coating film having a heat releasing property is coated on both surfaces of the metal sheet, the heat releasing magnetic coating film on at least one surface containing 1 mass% or more of carbon black, the coating film not containing carbon black contains 10 mass% or more of heat releasing additives other than carbon black; and

(3) an integrated emissivity of infrared rays (wavelength: 4.5 to 15.4 μm) when heating the resin coated metal sheet to 100°C can satisfy the following formula (1):

$$a \times b \geq 0.42 \dots \text{formula (1)}$$

where

a is integrated infrared ray emissivity at one surface of the resin coated metal sheet, and

b is integrated infrared ray emissivity at another surface of the resin coated metal sheet.

Claim 8 (Original): The resin coated metal sheet according to claim 7, wherein an average particle size of carbon black is from 5 to 100 nm.

Claims 9-10 (Canceled)

Claim 11 (Currently Amended): A resin coated metal sheet in which [[a]] an electrically conductive magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 50 μm at least on one surface of a metal sheet, wherein

the magnetic powder is ~~selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder;~~ and

the resin coated metal sheet can satisfy the following (1) or (2) and satisfies the following (3) and (4), where

(1) one surface of the metal sheet is coated with the magnetic coating film, the magnetic coating film selectively containing black additives, and a resin coating film containing at least one of a white pigment and a luster pigment is coated selectively on the magnetic coating film containing the black additives, and

another surface of the metal sheet is coated with a black coating film containing black additives and a resin coating film containing at least one of a white pigment and a luster pigment;

(2) both surfaces of the metal sheet are coated each with the magnetic coating film, the magnetic coating on at least one surface is a black magnetic coating film containing black additives, a resin coating film comprising at least one of a white pigment and a luster pigment is coated on the black magnetic coating film, and another surface is selectively coated with a resin coating film containing at least one of a white pigment and a luster pigment;

(3) a thickness of each of the resin coating films is from 0.5 to 10 μm and an addition amount of the white pigment and the luster pigment contained in each of the resin coating films is from 1 to 25 mass% in total; and

(4) a color of a resin coated metal sheet with addition of a white pigment and a luster pigment can satisfy an L value from 44.0 to 60.0 as measured by a color difference meter (SZS- Σ 90) manufactured by Nippon Denshoku Industries Co., Ltd.

Claim 12 (Original): The resin coated metal sheet according to claim 11, wherein at least one of the white pigment and the luster pigment contained in the resin film is an oxide pigment.

Claim 13 (Original): The resin coated metal sheet according to claim 11, wherein at least one of the white pigment and the luster pigment contains titanium oxide.

Claim 14 (Currently Amended): A resin coated metal sheet in which [[a]] an electrically conductive magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 50 μm at least on one surface of a metal sheet, wherein the magnetic powder is ~~selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder~~; and

the resin coated metal sheet can satisfy the following (1) or (2) and satisfies the following (3) to (5), where

(1) one surface of the metal sheet is coated with the magnetic coating film which is a heat releasing magnetic coating film having a heat releasing property, the heat releasing magnetic coating film selectively contains black additives and, in a case where the heat releasing magnetic coating film contains the black additives, a resin coating film containing at least one of a white pigment and a luster pigment is further coated selectively, another surface of the metal sheet is coated with a heat releasing coating film of 1 μm or more and a resin coating film containing at least one of a white pigment and a luster pigment, at least one of the heat releasing magnetic coating film and the heat releasing coating film contains 1 mass% or more of carbon black, and a surface not containing carbon black contains 10 mass% or more of heat releasing additives;

(2) both surfaces of the metal sheet are coated with the magnetic coating film which is a heat releasing magnetic coating film having a heat releasing property, at least one surface of the heat releasing magnetic coating film contains 1 mass% or more of carbon black, and a surface not containing carbon black contains 10 mass% or more of heat releasing additives, and a resin coating film containing at least one of a white pigment and a luster pigment is coated further over the heat releasing magnetic coating film on at least one surface;

(3) an integrated emissivity of infrared rays (wavelength: 4.5 to 15.4 μm) when heating the resin coated metal sheet to 100°C can satisfy the following formula (1):

$$a \times b \geq 0.42 \dots \text{formula (1)}$$

where

a is integrated infrared ray emissivity at one surface of the resin coated metal sheet, and

b is integrated infrared ray emissivity at another surface of the resin coated metal sheet;

(4) a thickness of the resin coating film is from 0.5 to 10 μm , and an addition amount of the white pigment and the luster pigment contained in the resin coating film is from 1 to 25 mass% in total; and

(5) a color of a resin coated metal sheet with addition of a white pigment and a luster pigment can satisfy an L value from 44.0 to 60.0 as measured by a color difference meter (Szs- Σ 90) manufactured by Nippon Denshoku Industries Co., Ltd.

Claim 15 (Original): The resin coated metal sheet according to claim 14, wherein an average particle size of the carbon black is from 5 to 100 nm.

Claims 16-21 (Canceled)

Claim 22 (New): A resin coated metal sheet in which an electrically conductive magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 15 μm at least on one surface of a metal sheet, wherein

the magnetic powder is soft magnetic ferrite powder;

the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive; and

the resin coated metal sheet satisfies the following (1) or (2) and satisfies the following (3), where

(1) the magnetic coating film described above which is a heat releasing magnetic coating film having a heat releasing property is coated on one surface of the metal sheet and a heat releasing coating film of a thickness of 1 μm or more is coated on another

surface of the metal sheet, at least one of the heat releasing magnetic coating film and the heat releasing coating film contains 1 mass% or more of carbon black, and the coating film not containing carbon black contains 10 mass% or more of heat releasing additives other than carbon black;

(2) the magnetic coating film which is a heat releasing magnetic coating film having a heat releasing property is coated on both surfaces of the metal sheet, the heat releasing magnetic coating film on at least one surface containing 1 mass% or more of carbon black, the coating film not containing carbon black contains 10 mass% or more of heat releasing additives other than carbon black; and

(3) an integrated emissivity of infrared rays (wavelength: 4.5 to 15.4 μm) when heating the resin coated metal sheet to 100°C can satisfy the following formula (1):

$$a \times b \geq 0.42 \dots \text{formula (1)}$$

where

a is integrated infrared ray emissivity at one surface of the resin coated metal sheet, and

b is integrated infrared ray emissivity at another surface of the resin coated metal sheet.

Claim 23 (New): A resin coated metal sheet in which an electrically conductive magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 15 μm at least on one surface of a metal sheet, wherein

the magnetic powder is soft magnetic ferrite powder;

the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive; and

the resin coated metal sheet can satisfy the following (1) or (2) and satisfies the following (3) and (4), where

(1) one surface of the metal sheet is coated with the magnetic coating film, the magnetic coating film selectively containing black additives, and a resin coating film containing at least one of a white pigment and a luster pigment is coated selectively on the magnetic coating film containing the black additives, and

another surface of the metal sheet is coated with a black coating film containing black additives and a resin coating film containing at least one of a white pigment and a luster pigment;

(2) both surfaces of the metal sheet are coated each with the magnetic coating film, the magnetic coating on at least one surface is a black magnetic coating film containing black additives, a resin coating film comprising at least one of a white pigment and a luster pigment is coated on the black magnetic coating film, and another surface is selectively coated with a resin coating film containing at least one of a white pigment and a luster pigment;

(3) a thickness of each of the resin coating films is from 0.5 to 10 μm and an addition amount of the white pigment and the luster pigment contained in each of the resin coating films is from 1 to 25 mass% in total; and

(4) a color of a resin coated metal sheet with addition of a white pigment and a luster pigment can satisfy an L value from 44.0 to 60.0 as measured by a color difference meter (SWS- Σ 90) manufactured by Nippon Denshoku Industries Co., Ltd.

Claim 24 (New): A resin coated metal sheet in which an electrically conductive magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 15 μm at least on one surface of a metal sheet, wherein

the magnetic powder is soft magnetic ferrite powder;
the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive; and

the resin coated metal sheet can satisfy the following (1) or (2) and satisfies the following (3) to (5), where

(1) one surface of the metal sheet is coated with the magnetic coating film which is a heat releasing magnetic coating film having a heat releasing property, the heat releasing magnetic coating film selectively contains black additives and, in a case where the heat releasing magnetic coating film contains the black additives, a resin coating film containing at least one of a white pigment and a luster pigment is further coated selectively, another surface of the metal sheet is coated with a heat releasing coating film of 1 μm or more and a resin coating film containing at least one of a white pigment and a luster pigment, at least one of the heat releasing magnetic coating film and the heat releasing coating film contains 1 mass% or more of carbon black, and a surface not containing carbon black contains 10 mass% or more of heat releasing additives;

(2) both surfaces of the metal sheet are coated with the magnetic coating film which is a heat releasing magnetic coating film having a heat releasing property, at least one surface of the heat releasing magnetic coating film contains 1 mass% or more of carbon black, and a surface not containing carbon black contains 10 mass% or more of heat releasing additives, and a resin coating film containing at least one of a white pigment and a luster pigment is coated further over the heat releasing magnetic coating film on at least one surface;

(3) an integrated emissivity of infrared rays (wavelength: 4.5 to 15.4 μm) when heating the resin coated metal sheet to 100°C can satisfy the following formula (1):

$$a \times b \geq 0.42 \dots \text{formula (1)}$$

where

a is integrated infrared ray emissivity at one surface of the resin coated metal sheet, and

b is integrated infrared ray emissivity at another surface of the resin coated metal sheet;

(4) a thickness of the resin coating film is from 0.5 to 10 μm , and an addition amount of the white pigment and the luster pigment contained in the resin coating film is from 1 to 25 mass% in total; and

(5) a color of a resin coated metal sheet with addition of a white pigment and a luster pigment can satisfy an L value from 44.0 to 60.0 as measured by a color difference meter (Szs- Σ 90) manufactured by Nippon Denshoku Industries Co., Ltd.